

IN THE SPECIFICATION

Please amend the paragraph beginning on page 1, line 4 of the specification to the form as follows:

Furthermore, ~~the invention~~ an embodiment relates to a system of determining a best-case response time of a first periodic task, the system comprising determination means conceived to determine that the first periodic task has a lower priority than a higher priority of a second periodic task.

Please amend the paragraph beginning on page 1, line 8 of the specification to the form as follows:

Furthermore, ~~another embodiment the invention~~ another embodiment relates to a computer program product arranged to perform the method of determining a best-case response time of a first periodic task.

Please amend the paragraph beginning on page 1, line 10 of the specification to the form as follows:

Another embodiment ~~Furthermore, the invention~~ relates to a storage device, a television set and a set-top box.

Please amend the paragraph beginning on page 2, line 1 of the specification to the form as follows:

An embodiment provides ~~It is an object of the current invention to provide a method according to the preamble that derives a tighter lower bound on the best-case response time of a task. To achieve this object, another embodiment the method according to the invention is characterized in that the method further comprises a second step of determining that the best-case response time of the first periodic task is substantially equal to the difference between a start of the first periodic task right after its release and a completion of the first periodic task that coincides with a release of the second periodic task. By using this optimal instant to determine the best-case response time, the number of preemptions of the first periodic task by higher periodic tasks, such as the second periodic task, can be minimized. Furthermore, the execution~~

time of the first periodic task can be minimized. The best-case response time can be used within distributed systems wherein the output of a triggering task running on a system or processor is the input of an other, following, task running on an other system or an other processor. Then, the jitter or time variation in the completion of the triggering task results in a release jitter of the following task, which in turn has an effect on the worst-case response times of tasks that are triggered by the following task. Therefore, the optimal instant enables an improvement of the resource utilization of a system. Since tasks use resources of a real-time system or a distributed real-time system, and these real-time resources are finite, the number of schedulable tasks is amongst others determined by their worst-case response times and best-case response times. When a worst-case response time or best-case response time of a task exceeds a deadline of that task, the task cannot be scheduled. Tasks that cannot be scheduled do not use resources of a system, which may result in a smaller resource utilization of the system.

Please amend the paragraph beginning on page 3, line 26 of the specification to the form as follows:

A further object of another the invention is to provide a system according to the preamble that derives a tighter lower bound on the best-case response time of a task. To achieve this object, the system for determining a best-case response time of a first periodic task according to the current invention is characterized in that the system further comprises response time means conceived to determine that the best-case response time of the first periodic task is substantially equal to the difference between a start of the first periodic task right after its release and a completion of the first periodic task that coincides with a release of the second periodic task.